

## Ecological attributes of strategic land acquisitions for addition to Victoria's public protected area estate: 2004-2005

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### Abstract

The development of a comprehensive, adequate and representative reserve system is the key objective of the National Reserve System, and is supported by all Australian States and Territories. In Victoria, the purchase of private land for incorporation into the parks and reserves system assists in the protection of some of the State's most endangered ecosystems. This article outlines the ecological attributes of private land purchased for addition to the Victorian public protected area system between 2004 and 2005. (*The Victorian Naturalist* 123 (3) 2006, 134-145)

### Introduction

This article documents some of the more significant land purchases made by the Department of Sustainability and Environment for addition to the public conservation estate from early 2004 until late 2005, and provides a brief description of their ecological attributes. It serves as an extension to previous descriptions of the operation of the Department's Conservation Land Purchase Program in Victoria (see Fitzsimons and Ashe 2003, Fitzsimons *et al.* 2004). The program aims to systematically improve the comprehensiveness, adequacy, and representativeness of the reserve system, with particular emphasis on high-quality examples of threatened and under-reserved ecosystems such as native grasslands and grassy woodlands. All acquisitions are on a completely voluntary basis.

Purchase priorities are derived from inventories of the most significant sites containing threatened ecosystems throughout the State and assessed in relation to the comprehensiveness, adequacy and representativeness of the existing reserve system. The Department also purchases private land to link park and reserve areas and remove inliers in order to consolidate protected habitat and alleviate potential management problems. All purchases described in this paper are managed for the conservation of biodiversity by Parks Victoria except for Melton Gilgai Woodlands

Nature Conservation Reserve, which will be managed by the Shire of Melton.

The conservation status of all species listed in this paper is outlined in Appendix 1, while Appendix 2 lists communities listed under the *Flora and Fauna Guarantee Act 1988* represented in the new reserves. Fig. 1 indicates the location of recent purchases within Victoria.

### 1. Mumbannar Wetlands and Woodlands

This 155 ha block in Mumbannar, south-west Victoria, protects high-quality Freshwater Meadows and Damp Sands Herb-rich Woodland/Damp Heathland/Damp Heathy Woodland Mosaic Ecological Vegetation Classes (EVCs). Both ecosystems are endangered in the Naracoorte Coastal Plain (a national biodiversity hotspot) and very poorly reserved.

The wetlands and woodlands represented on the property, which have been substantially cleared and modified throughout south-western Victoria, are priority ecosystems for addition to the protected area system. The vegetation is characterised by a Brown Stringybark *Eucalyptus baxteri* woodland occurring on the higher areas of the property, with an intact understorey including *Xanthorrhoea* and *Exocarpos* species. This grades into a Prickly Tea-tree *Leptospermum continentale* and Scrub Sheoak *Allocasuarina paludosa* shrubland



Fig. 1. Location of recent land purchases (numbered) for addition to the reserve system (existing reserve system shaded).

and heathland, ultimately fringing a *Ghania* and sedge-margined wetland. Significant flora recorded on-site includes the Small Spotted Sun-orchid *Thelymitra* aff. *ixioides* (Western Victoria).

The property provides known habitat for nationally endangered species such as the Red-tailed Black-Cockatoo *Calyptrorhynchus banksii graptogyne* and Southern Brown Bandicoot *Isodon obesulus obesulus*, and acts as an important ecological stepping stone between larger protected forests. Other significant fauna recorded on the property include Brolga *Grus rubicunda*, Swamp Skink *Egernia coventryi* and Swamp Antechinus *Antechinus minimus maritimus*.

The new reserve is known as the Mumbannar Nature Conservation Reserve.

## 2. Bessiebelle Stony Rises Woodland, Mount Eccles

This 162 ha addition to the Mount Eccles National Park contains very high quality stands of Stony Rises Woodland EVC which is considered vulnerable and under-reserved in the Victorian Volcanic Plain. Stony Rises Woodland occurs on 138 ha of the property.

The remainder of the property contains the endangered Swamp Scrub/Plains Sedge Wetland/Aquatic Herbfield Mosaic EVC. This ecosystem occurs on the drained seasonal wetland at the edge of the lava flow. The EVC once covered 8700 ha of the bioregion, but has now been reduced to less than 0.4% of this former range and is almost unreserved.

The Stony Rises Woodland provides potential habitat for the Spot-tailed Quoll *Dasyurus maculatus* which occurs in the adjoining National Park. The Stony Rises Woodland sections of the property are in excellent condition, with hollow-bearing veteran trees providing habitat for species such as the Yellow-bellied Glider *Petaurus australis*. The shrub and ground layers are intact with no woody weeds and very few grassy weeds present. The nationally vulnerable Clover Glycine *Glycine latrobeana* has also been recorded from the site.

In addition to the ecological values, the purchase of the Bessiebelle property also protects the significant Indigenous cultural heritage values, including stone huts.

### 3. Yambuk Wetlands

This 79 ha of Shallow Freshwater Marsh and Swamp Scrub at Yambuk represents one of the highest quality examples of protected estuarine wetlands in Victoria. These nationally significant wetlands and Swamp Scrub provide important breeding habitat for numerous bird and fish species, a number of which are nationally threatened. Such wetlands have been substantially drained and modified throughout southern Victoria and are priority ecosystems for addition to the protected area system. The purchased land adjoins the 453 ha Deen Maar Indigenous Protected Area, which contains contiguous wetland vegetation linked by the Eumeralla River, enhancing the long-term ecological integrity of the site.

Both Shallow Freshwater Marshes and Swamp Scrub have been substantially reduced in the Warrnambool Plain and are poorly-reserved. The Shallow Freshwater Marshes represented on the Yambuk Wetlands contrast with the semi-permanent saline wetlands of Deen Maar and saline wetlands of Lake Yambuk. Swamp Scrub is considered endangered in the bioregion and is almost unreserved.

Remnants of the Damp Sands Herb-rich Woodland EVC occur on the higher ground.

The property provides drought refuge for waterbirds, while 24 fish species have been recorded in Yambuk Lake and wetlands.

The wetlands provide known habitat for a number of significant species, including Dwarf Galaxias *Galaxiella pusilla*, Yarra Pigmy Perch *Nannoperca obscura*, Orange-bellied Parrot *Neophema chrysogaster*, Blue-billed Duck *Oxyura australis*, Little Egret *Egretta garzetta*, Freckled Duck *Stictonetta naevosa*, Great Egret *Ardea alba*, Lewin's Rail *Rallus pectoralis*, Australasian Shoveller *Anas rhynchos*, Australasian Bittern *Botaurus poiciloptilus*, Musk Duck *Biziura lobata*, Hardhead *Aythya australis*, Magpie Goose *Anseranas semipalmata*, Royal Spoonbill *Platalea regia*, Whiskered Tern *Chlidonias hybridus*, Nankeen Night Heron *Nycticorax caledonicus* and Pacific Golden Plover *Pluvialis fulva*. The wetlands are a breeding site for a number of these species. The Yambuk Wetlands are listed under the Directory of Important Wetlands in Australia (Environment Australia 2001), and the owners of Deen Maar are currently



Fig. 2. Dreeite Stony Knoll Shrublands and wetlands. Photograph by J Fitzsimons



investigating the possibility of listing them under the Ramsar convention (DEH 2004).

The new reserve is known as the Yambuk Wetlands Nature Conservation Reserve.

#### 4. Laharum Lateritic Woodlands

This 173 ha woodland property on the northern boundary of the Grampians National Park protects significant vegetation types, habitat for threatened species and important landscape linkages. Some 60% of the property is covered by Lateritic Woodland EVC, a vegetation type almost unrepresented in the protected area estate in the Wimmera bioregion. Lateritic Woodland is a low grassy woodland dominated by Grey Box *Eucalyptus microcarpa*, Yellow Box *E. melliodora* and Yellow Gum *E. leucoxylon* with a herb-rich and grassy understorey. The community is considered vulnerable and this is the second largest remnant of this vegetation type remaining in the bioregion. The property also contains areas of Shallow Sands Woodland, Seasonally Inundated Shrubland and Heathy Woodland EVCs.

The Laharum Woodlands provide known habitat for threatened species such as the Bush Stone-curlew *Burhinus grallarius*, Squirrel Glider *Petaurus norfolcensis* and

Tree Goanna *Varanus varius*. A number of threatened flora species are known to occur in Grampians National Park adjoining these woodlands and it is likely that many of these will also be present on the purchased land.

This property occurs between two areas of recognised flora and fauna significance in the Grampians National Park (Parks Victoria 2003), adjoins a Trust for Nature covenanted property to the north and vegetated private land to the west. Its addition to the Grampians National Park will ensure the long-term integrity of the ecosystems.

#### 5. Ledcourt Woodlands

This 19 ha addition to the Grampians National Park complements land previously purchased to the north (see Fitzsimons *et al.* 2004). It contains areas of endangered Plains Grassy Woodland dominated by River Red Gum *Eucalyptus camaldulensis* and Yellow Gums along Mount William Creek, as well as Heathy Woodland, Shrubby Woodland and Sand Heathland. The block contains excellent assemblages of heathland providing potential habitat for Long-nosed Potoroo *Potorous tridactylus*, Heath Mouse *Pseudomys shortridgei*, and Southern Brown Bandicoot.



Fig. 3. Melbourne Yellow Gum and Grey Box Woodland, Melton. Gilgai Woodlands Nature Conservation Reserve. Photograph by J Fitzsimons

## 6. Winlaton Chenopod Shrubland

This 80 ha of chenopod shrubland at Winlaton near the Kerang Lakes protects not only significant vegetation communities but also a range of threatened species. The newly-protected woodland/shrubland, together with an adjoining 130 ha covenanted property to the south, represents one of the largest and the highest quality examples of this vegetation known from the Riverina. Such woodlands have been substantially cleared and modified throughout northern Victoria and are priority ecosystems for addition to the protected area system. The presence of a number of rare, threatened and unreserved species highlights the significance of the property. The area around Winlaton is a zone of gradation between the true semi-arid Mallee and the Riverine Plains (Frood 2000). Whilst derived from the Riverine Chenopod Woodland EVC, the vegetation today would best be described as a Low Chenopod Shrubland dominated by a range of *Atriplex* species (mainly Small Saltbush *A. eardleyae* and Slender-fruit Saltbush *A. leptocarpa*) with a range of spring and summer tussock grasses and scattered annual and perennial herbs. Small areas of Lignum Swampy Woodland EVC occur along the depressions.

Combined with the covenanted habitat to the south, the site is considered of national significance for its botanical values (Ogle and Foreman 1999; Frood 2000) and highly significant at the state level for reptiles and mammals (Robertson 2000).

The purchased land contains the first record of the saltbush *Atriplex turbinata* for Victoria, which is a significant southerly range extension from the nearest known locality at Broken Hill (N Walsh pers. comm. 2004; P Foreman pers. comm. 2004). Other significant flora species recorded on the purchased land include Winged New Holland Daisy *Vittadinia pierochaeta*, Leafless Bluebush *Maireana aphylla*, Yakka Grass *Sporobolus caroli*, Mealy Saltbush *Atriplex pseudocampanulata*, Bladder Saltbush *Atriplex vesicaria macrocystidia* and Spiny Lignum *Muehlenbeckia horrida horrida*.

Additional significant species recorded from the covenanted property to the south, which may also occur on the purchased

property, include a large population of the endangered Samphire Skink *Morethia adalaidensis*, Grey-crowned Babbler *Pomatostomus temporalis*, Eastern Bearded Dragon *Pogona barbatus*, Fat-tailed Dunnart *Sminthopsis crassicaudata*, Chariot Wheels *Maireana cheelii*, Umbrella Wattle *Acacia oswaldii*, Dwarf Amaranth *Amaranthus macrocarpus* var. *macrocarpus*, Desert Sneezeweed *Centipeda thespidioides* s.l. and Mallee Cucumber *Mukia micrantha*. The initial discovery of the endangered Common White Sunray *Rhodanthe floribunda* on the covenanted property was the first record of this species in Victoria (Ogle and Foreman 1999). The covenanted property is considered likely to provide suitable habitat for Hooded Scaly-foot *Pygopus schraderi*, Plains-wanderer *Pedionomus torquatus* and Tessellated Gecko *Diplodactylus tessellatus*.

The new reserve is known as the Winlaton Nature Conservation Reserve.

## 7. Tomara Grasslands and Gilgais, Patho Plains

This large 332 ha Northern Plains Grassland at Terrick Terrick East forms part of a network of new native grassland reserves on the Patho Plains (see Fitzsimons and Ashe 2003; Fitzsimons *et al.* 2004).

The property consists of mostly Northern Plains Grassland, a *Flora and Fauna Guarantee Act*-listed community, with two identified finer scale sub-communities. An Annual Grassland occurring on the hard red loams is dominated by Common Wallaby-grass *Austrodanthonia caespitosa* with varying amounts of Rough Spear-grass *Austrostipa scabra*, Plump Spear-grass *Austrostipa aristiglumis* and Rigid Panic *Whalleya prolata* dominate small areas containing gilgais in this sub-community. A Wet Grassland sub-community is found on the grey soils in the drainage lines and depressions and is dominated by Windmill Grass *Chloris truncata* and *Enteropogon* spp. Both sub-communities are significant in that they are largely intact and contain only small areas where introduced species are present (Webster 2000).

Almost 60 species of indigenous plants have been recorded on the site, including

the vulnerable Long Eryngium *Eryngium paludosum*, Pin Sida *Sida fibulifera*, Umbrella Wattle and the rare Spiny Lignum and Yakka Grass.

Previous studies on the property have indicated that the grasslands are of conservation significance for the Plains-wanderer (Maher and Baker-Gabb 1993) which is nationally vulnerable and endangered in Victoria. Brolgas have been recorded using the wetland area. While little further detail is known of the fauna values of the site, the size, condition and proximity to nearby reserves suggests there is considerable potential to support other important grassland fauna values (e.g. see Michael *et al.* 2003).

The purchase complements efforts to protect native grasslands across public and private land on the Patho Plains via the Northern Plains Conservation Management Network (see Bain 2005).

The new reserve is known as the Tomara Gilgais Nature Conservation Reserve.

#### 8. Dreeite Stony Knoll Shrublands and wetlands

This 48 ha acquisition protects Stony Knoll Shrublands and permanent and ephemeral wetland communities at Dreeite, to the east of Lake Corangamite (Fig. 2). Stony Knoll Shrublands have been severely depleted throughout the Victorian Volcanic Plain bioregion and were previously unrepresented in protected areas. The shrublands are dominated by Tree Violet *Melicytus dentatus*, with scattered Blackwood *Acacia melanoxylon* and Black Wattle *A. mearnsii*. The new reserve forms part of a much larger area of Stony Rises in the Dreeite region.

The site provides critical habitat for the nationally endangered Corangamite Water Skink *Eulamprus tympanum maritiae*, which is endemic to the Victorian Volcanic Plain and which occurs mostly outside existing protected areas (Robertson 1998, Peterson 1999). The property supports large and stable populations of this and another significant species, the nationally vulnerable Growing Grass Frog *Litoria raniformis*, possibly due to the spring fed permanent wetland (G. Peterson pers. comm. 2003). These populations could act as an important source for recolonisation of adjacent sites following

recent population declines and extinctions. The wetlands on the property are also utilised by a number of bird species that are threatened in Victoria (e.g. Brolga, Lewin's Rail, Freckled Duck, Australasian Shoveler *Anas rhynchosotis*, Latham's Snipe *Gallinago hardwickii* and Whiskered Tern).

The property contains a number of significant Indigenous cultural heritage values.

The new reserve is known as the Dreeite Nature Conservation Reserve.

#### 9. Melton Gilgai Woodlands

Almost 34 ha of endangered Plains Woodland at Harkness Road, Melton, was purchased in 2005 for nature conservation (Fig. 3). Although the site is located in the Victorian Volcanic Plains bioregion, it lies close to the southern slopes of uplands to its north. As a result the basalt of the plains is overlain with Quaternary colluvial outwash of the eroding uplands forming a swale/gilgai landform with gravels and soils derived from a mixture of basaltic, calcareous and siliceous sources (Webster 2001; Walters and Frood 2004).

The property is a site of botanical significance in western Melbourne (McDougall 1987). Grey Box-Melbourne Yellow Gum *Eucalyptus leucoxylon* subsp. *connata* grassy woodlands (part of the Plains Woodland EVC) are considered endangered and are almost unrepresented in the reserve system in the bioregion. The new reserve represents a distinct floristic community of Plains Woodland EVC (Walters and Frood 2004). The diverse groundlayer is open, grassy and herbaceous, with low saltbush and a component of succulents. A soil crust of lichens and bryophytes is conspicuous over much of the site.

Over 80 indigenous plant species have been recorded from the property. A number of significant flora species occur on the site, including the rare Cane Spear-grass *Austrostipa breviglumis*, Heath Spear-grass *Austrostipa exilis*, Fragrant Saltbush *Rhagodia parabolica* and the vulnerable Melbourne Yellow Gum. A significant understorey population of the regionally depleted Turkey Bush *Eremophila deserti* also occurs in the understorey.

The purchased land represents one of the last remnants of once more extensive woodlands that covered the Melton/





Fig. 4. Grey Box and Buloke grassy woodland, Goomalibee. Photograph by J Fitzsimons



Fig. 5. Dave's Hill addition to the Mount Meg Nature Conservation Reserve.

Toolern Vale area (Robinson 1993). The property contains a predominance of key foraging trees for the nationally endangered Swift Parrot *Lathamus discolor*, a species recently recorded from similar roadside habitat in the area. A number of declining woodland birds can still be found on the site, including Diamond Firetail *Stagonopleura guttata* and Brown Treecreeper *Climacteris picumnus*. It is also anticipated that a range of amphibian species would occur in the swale/gilgai depressions that become inundated after prolonged and/or heavy rain episodes.

The new reserve is known as the Melton Gilgai Woodlands Nature Conservation Reserve.

#### 10. Goomalibee Gilgai Plain Woodlands, Benalla

This 179 ha remnant of Gilgai Plain Woodland/Wetland Mosaic falls within the eastern Victorian Riverina bioregion, which is considered a high priority for further reservation. Such woodlands have been substantially cleared and modified throughout their range and blocks of this size are very rare.

The property comprises an open woodland with an overstorey of River Red Gum, Grey Box and Buloke *Allocasuarina luehmianii* and a groundlayer of wallaby-grass, tussock-grass, sedges and herbs (representing a component of the FFG-listed Grey Box-Buloke Grassy Woodland community) (Fig. 4). The significance of the property is highlighted by the presence of numerous gilgais, which are surrounded by a variety of herbs such as Swamp Billy-buttons *Craspedia paludicola* and Slender Goodenia *Goodenia gracilis*.

The Goomalibee Woodlands provide known habitat for two threatened bird species – the Bush Stone-curlew and Grey-crowned Babbler. This part of north-east Victoria is recognised as the stronghold for these species in the State. The nationally endangered Swift Parrot is known to use the adjoining roadsides. The significant roadside vegetation links the property to other patches of vegetation, providing corridors for the movement of other threatened species such as the Tree Goanna.

The new reserve is known as the Goomalibee Nature Conservation Reserve.

#### 11. Dave's Hill, Chesney Vale Hills

The 99 ha addition of Dave's Hill to the Mount Meg Nature Conservation Reserve (NCR) enhances the protection of endangered vegetation communities and species habitat in the Chesney Vale Hills. The property is characterised by Granitic Hills Woodland EVC and nationally endangered Grassy White Box *Eucalyptus albens* Woodlands on the lower slopes. Grassy White Box Woodlands have been substantially cleared and modified throughout northern Victoria and the wheat-sheep belt of NSW (Prober and Thiele 1993) and are priority ecosystems for addition to the protected area system.

The Granitic Hills Woodland is dominated by Blakely's Red Gum *Eucalyptus blakelyi*, with a mix of Drooping Sheoak *Allocasuarina verticillata* and Lightwood *Acacia implexa* amongst complex granitic outcrops. Small areas of endangered Springs oak Herblands also occur on adjoining public land which will be added to the reserve.

The Chesney Vale Hills are considered one of the most important habitats in Victoria for the endangered Inland Carpet Python *Morelia spilota macleayi* (Allen *et al.* 2003; Heard and Black 2003; Heard *et al.* 2004). The pythons move between Dave's Hill and Mount Meg (see Fig. 5). Dave's Hill provides important habitat for a range of other reptile species (Heard and Black 2003), including Tree Goanna and Eastern Bearded Dragon.

The Chesney Vale Hills are considered an important site for the nationally vulnerable Narrow Goodenia *Goodenia macbaronii* (Berwick 1996), and is one of only seven Northern Sandalwood *Santalum lanceolatum* populations known in the State (Johnson 1996).

The Dave's Hill purchase is linked to other components of the Mount Meg NCR through the acquisition of adjoining land by the Trust for Nature for covenanting and onsale through its 'Revolving Fund' (see Fitzsimons and Davies 2005). This land contains a number of additional significant species including the Turquoise Parrot *Neophema pulchella*, Bush Stone-curlew and Flat-leaf Bush-pea *Pultenaea platyphylla*.



## 12. River Point East, French Island

This small (1 ha) addition to French Island National Park forms part of a larger block of vegetation which was 'Rated A' for botanical significance in the Western Port district (i.e. Site of Significance No. 25 'River Point East' in Opie *et al.* 1984). The Coast Road block contains endangered Swamp Scrub as well as Heathy Woodland, and protects significant orchid populations such as the White *Caladenia Caladenia catenata* and the nationally vulnerable French Island Spider-orchid *Caladenia insularis*.

## 13. Kangaroo Swamp, Mullungdung Forest

This 105 ha purchase in the heart of Mullungdung Forest includes Kangaroo Swamp and surrounding Lowland Forest. Kangaroo Swamp represents the largest freshwater sedge wetland in central Gippsland, and has been identified as a site of zoological (Mansergh and Norris 1982), botanical (Gullan *et al.* 1984) and geomorphological (Rosengren *et al.* 1981) significance in that region.

The swamp's position within the Mullungdung forest (the largest remnant on the Gippsland Plain at ~25,000 ha) will ensure its long-term ecological integrity, and it is adjoined by Special Protection Zones within the Mullungdung State Forest (see DSE 2004).

The size and position of the swamp within Mullungdung makes it an important focus of the forest. Kangaroo Swamp is likely to be an important refuge for frogs and waterbirds during drought (Gilmore 1977). As there are few other perennial watercourses or waterbodies in the forest, the Swamp is a significant drinking location for forest fauna and an important nesting site for waterbirds and raptors. The large, hollow-bearing trees at the site provide important nesting opportunities for species reliant on such conditions. A number of significant species has been recorded on the property, including Barking Owl *Ninox connivens*, Powerful Owl *N. strenua*, Great Egret, Hardhead, Latham's Snipe, Spotted Quail-thrush *Cinclosoma punctatum*, Tree Goanna and Martin's Toadlet *Uperoleia martini*.

The new reserve is known as the Kangaroo Swamp Nature Conservation Reserve.

## Other purchases

Other purchases include a small area of Gilgai Plain Woodland at Drumanure for addition to the Broken-Boosey State Park and land at Kalimna Park for addition to the Castlemaine Diggings National Heritage Park.

## Future directions for land purchase and the protected area system

Such strategic acquisitions, combined with other instruments to protect ecosystems on private land, ultimately aim to improve the comprehensiveness, adequacy and representativeness of Victoria's protected area system. Negotiations for the purchase of other poorly represented ecosystems are currently in progress. Particular emphasis is on native grasslands and grassy woodlands. The Department's efforts are complemented by those of the Trust for Nature (Victoria) which has and continues to purchase properties containing grassy and other threatened ecosystems throughout the State as part of the National Reserve System program. Increasingly, creative solutions are being sought between DSE and the Trust to secure important conservation lands (see Fitzsimons and Davies 2005).

Further details, including Management Statements for a number of these purchased properties, can be accessed via the Conservation Land Purchase Program website: [www.dse.vic.gov.au/parks\\_and\\_reserves/about\\_parks\\_and\\_reserves/conservation\\_land\\_purchase\\_program](http://www.dse.vic.gov.au/parks_and_reserves/about_parks_and_reserves/conservation_land_purchase_program).

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ties have ensured the maintenance of these remnants. Many of the past owners still have a strong connection to the new protected areas. The Commonwealth Government, through the National Reserve System Program of the Natural Heritage Trust, provided funding for the purchase of a number of these properties.

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**Appendix 1.** Some species occurring (or likely to occur) on recently purchased land (and their conservation status). Abbreviations: (Victorian Status) ce, critically endangered; e, endangered; v, vulnerable; r, rare; n, near threatened; k, poorly known/data deficient; (FFG) L, listed under the *Flora and Fauna Guarantee Act 1988*; (Commonwealth Status); E, endangered; V, vulnerable. Derived from DSE (2003, 2005), *Flora and Fauna Guarantee Act 1988* and *Environment Protection and Biodiversity Conservation Act 1999*. Note: This table does not represent all species occurring in the above-mentioned reserves.

	Scientific Name	Common Name	Vic Status	FFG	Cwlth Status
<b>Mammals</b>	<i>Antechinus minimus maritimus</i>	Swamp Antechinus	n	L	
	<i>Dasyurus maculatus</i>	Spot-tailed Quoll	e	L	V
	<i>Isodon obesulus obesulus</i>	Southern Brown Bandicoot	n		E
	<i>Petaurus australis</i>	Yellow-bellied Glider			
	<i>Petaurus norfolcensis</i>	Squirrel Glider	e	L	
	<i>Potorous tridactylus tridactylus</i>	Long-nosed Potoroo	e	L	V
	<i>Pseudomys shortridgei</i>	Heath Mouse	n	L	V
	<i>Sminthopsis crassicaudata</i>	Fat-tailed Dunnart	n		
<b>Birds</b>	<i>Anas rhynchotis</i>	Australasian Shoveller	v		
	<i>Anseranas semipalmata</i>	Magpie Goose	v		
	<i>Ardea alba</i>	Great Egret	v	L	
	<i>Aythya australis</i>	Hardhead	v		
	<i>Biziura lobata</i>	Musk Duck	v		
	<i>Botaurus poiciloptilus</i>	Australasian Bittern	e	L	
	<i>Burhinus grallarius</i>	Bush Stone-curlew	e	L	
	<i>Calyptorhynchus banksii graptogyne</i>	Red-tailed Black-Cockatoo	e	L	E
	<i>Chlidonias hybridus</i>	Whiskered Tern	n		
	<i>Cincoloma punctatum</i>	Spotted Quail-thrush	n		
	<i>Climacteris picumnus victoricae</i>	Brown Treecreeper	n		
	<i>Egretta garzetta</i>	Little Egret	e	L	
	<i>Gallinago hardwickii</i>	Latham's Snipe	n		
	<i>Grus rubicunda</i>	Brolga	v	L	
	<i>Lathamus discolor</i>	Swift Parrot	e	L	E
	<i>Neophema chrysogaster</i>	Orange-bellied Parrot	ce	L	E
	<i>Neophema pulchella</i>	Turquoise Parrot	n	L	
	<i>Ninox connexa</i>	Barking Owl	e	L	
	<i>Ninox strenua</i>	Powerful Owl	v	L	
	<i>Nycticorax caledonicus</i>	Nankeen Night Heron	n		
	<i>Oxyura australis</i>	Blue-billed Duck	e	L	
	<i>Pedionomus torquatus</i>	Plains-wanderer	ce	L	V
	<i>Platalea regia</i>	Royal Spoonbill	v		
	<i>Pluvialis fulva</i>	Pacific Golden Plover	n		
	<i>Pomatostomus temporalis</i>	Grey-crowned Babbler	e	L	
	<i>Rallus pectoralis</i>	Lewin's Rail	v	L	
	<i>Stagonopleura guttata</i>	Diamond Firetail	v	L	
	<i>Stictonetta naevosa</i>	Freckled Duck	e	L	
<b>Reptiles</b>	<i>Diplodactylus tessellatus</i>	Tessellated Gecko	n		
	<i>Egernia coventryi</i>	Swamp Skink	v	L	
	<i>Eulamprus tympanum marnieae</i>	Corangamite Water Skink	ce	L	E
	<i>Morelia spilota metcalfei</i>	Inland Carpet Python	e	L	
	<i>Morelia adelaidensis</i>	Samphire Skink	e	L	
	<i>Pogona barbatus</i>	Eastern Bearded Dragon	k		
	<i>Pygopus schraderi</i>	Hooded Scaly-foot	ce	L	
<b>Amphibians</b>	<i>Varemus varius</i>	Tree Goanna	v		
	<i>Litoria raniformis</i>	Growing Grass Frog	e	L	V
<b>Fishes</b>	<i>Uperoleia martini</i>	Martin's Toadlet	k		
	<i>Galaxiella pusilla</i>	Dwarf Galaxias	v	L	V
<b>Plants</b>	<i>Nannoperca obscura</i>	Yarra Pigmy Perch	n	L	V
	<i>Acacia implexa</i>	Lightwood			
	<i>Acacia mearnsii</i>	Black Wattle			



## Appendix 1 cont'd.

Scientific Name	Common Name	Vic Status	FFG	CwIth Status
<i>Acacia melanoxylon</i>	Blackwood			
<i>Acacia oswatdii</i>	Umbrella Wattle	v		
<i>Allocasuarina luehmmanii</i>	Buloke		L	
<i>Allocasuarina paludosa</i>	Scrub Sheoak			
<i>Allocasuarina verticillata</i>	Drooping Sheoak			
<i>Amaranthus macrocarpus</i>	Dwarf Amaranth	v		
var. <i>macrocarpus</i>				
<i>Atriplex eardleyae</i>	Small Saltbush			
<i>Atriplex leptocarpa</i>	Slender-fruit Saltbush			
<i>Atriplex pseudocampanulata</i>	Mealy Saltbush	r		
<i>Atriplex turbinata</i>				
<i>Atriplex vesicaria macrocystidia</i>	Bladder Saltbush	k		
<i>Austroanthonia caespitosa</i>	Common Wallaby-grass			
<i>Austrostipa aristiglumis</i>	Plump Spear-grass			
<i>Austrostipa breviglumis</i>	Cane Spear-grass	r		
<i>Austrostipa exilis</i>	Heath Spear-grass	r		
<i>Austrostipa scarbra</i>	Rough Spear-grass			
<i>Caladenia catenata</i>	White Fingers			
<i>Caladenia insularis</i>	French Island Spider-orchid	v	L	V
<i>Centipeda thespidioides</i> s.l.	Desert Sneezeweed	r		
<i>Chloris truncata</i>	Windmill Grass			
<i>Craspedia paludicola</i>	Swamp Billy-buttons			
<i>Eremophila deserti</i>	Turkey Bush			
<i>Eryngium paludosum</i>	Long Eryngium	v		
<i>Eucalyptus albens</i>	White Box			
<i>Eucalyptus baxteri</i>	Brown Stringybark			
<i>Eucalyptus blakelyi</i>	Blakely's Red Gum			
<i>Eucalyptus camaldulensis</i>	River Red Gum			
<i>Eucalyptus leucoxydon</i>	Yellow Gum			
<i>Eucalyptus leucoxydon connata</i>	Melbourne Yellow Gum	v		
<i>Eucalyptus melliodora</i>	Yellow Box			
<i>Eucalyptus microcarpa</i>	Grey Box			
<i>Glycine latrobeana</i>	Clover Glycine	v	L	V
<i>Goodenia gracilis</i>	Slender Goodenia			
<i>Goodenia macbarronii</i>	Narrow Goodenia	v	L	V
<i>Leptospermum continentale</i>	Prickly Tea-tree			
<i>Maireana aphylla</i>	Leafless Bluebush	v		
<i>Maireana cheelii</i>	Chariot Wheels	v		V
<i>Melicope dentatus</i>	Tree Violet			
<i>Muehlenbeckia horrida</i>	Spiny Lignum	r		
<i>Mukia micrantha</i>	Mallee Cucumber	r		
<i>Pultenaea platyphylla</i>	Flat-leaf Bush-pea	r		
<i>Rhagodia parabolica</i>	Fragrant Saltbush	r		
<i>Rhodanthe floribunda</i>	Common White Sunray	e		
<i>Santalum lanceolatum</i>	Northern Sandalwood	e	L	
<i>Sida fibulifera</i>	Pin Sida	v		
<i>Sporobolus caroli</i>	Yakka Grass	r		
<i>Thelymitra</i> aff. <i>ixioides</i>	Small Spotted Sun-orchid	k		
(Western Victoria)				
<i>Vittadinia pterochaeta</i>	Winged New Holland Daisy	v		
<i>Whalleya prolata</i>	Rigid Panic			

Appendix 2. Some listed *Flora and Fauna Guarantee Act 1988* communities occurring on recently purchased land.

Northern Plains Grassland Community	Victorian Temperate-woodland Bird Community
Grey Box - Buloke Grassy Woodland Community	